

chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

chain bonds :

1-2 2-3 3-4 3-10 4-5 5-6 6-7 7-8 7-11 8-9 10-12 12-13 13-14 13-16  
14-15

exact/norm bonds :

1-2 3-10 4-5 5-6 7-11 8-9 10-12 13-16

exact bonds :

2-3 3-4 6-7 7-8 12-13 13-14 14-15

G1:C,H

Match level :

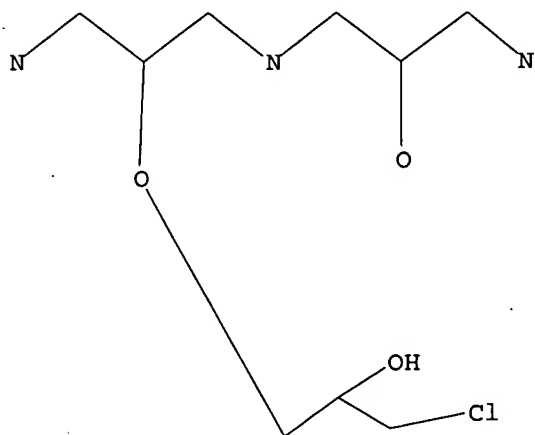
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 13:53:22 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 109 TO ITERATE

100.0% PROCESSED 109 ITERATIONS

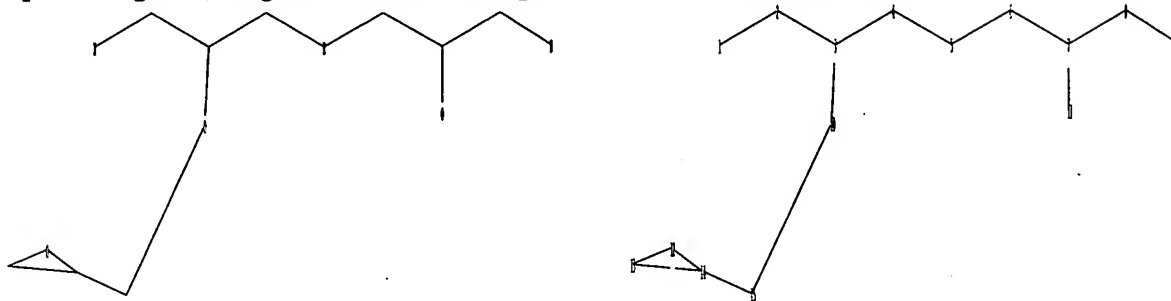
0 ANSWERS

SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\10-795772a1.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 15

ring nodes :

12 13 14

chain bonds :

1-2 2-3 3-4 3-10 4-5 5-6 6-7 7-8 7-11 8-9 10-15 14-15

ring bonds :

12-13 12-14 13-14

exact/norm bonds :

1-2 3-10 4-5 5-6 7-11 8-9 10-15 12-13 12-14 13-14

exact bonds :

2-3 3-4 6-7 7-8 14-15

G1:C,H

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

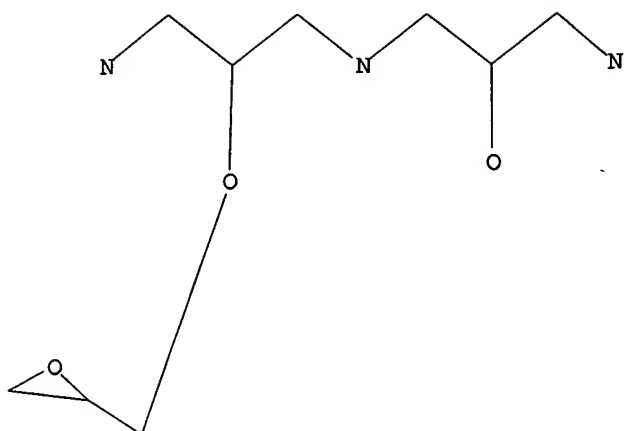
10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:CLASS

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s l3 ful

FULL SEARCH INITIATED 13:53:44 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 891 TO ITERATE

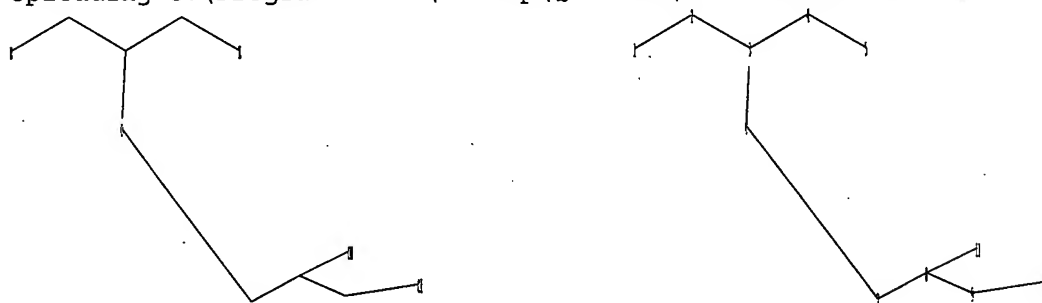
100.0% PROCESSED 891 ITERATIONS  
 SEARCH TIME: 00.00.01

0 ANSWERS

L4 0 SEA SSS FUL L3

=>

Uploading C:\Program Files\Stnexp\Queries\10-795772a3.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

1-2 2-3 3-4 3-6 4-5 6-7 7-8 8-9 8-11 9-10

exact/norm bonds :

1-2 3-6 4-5 6-7 8-11

exact bonds :

2-3 3-4 7-8 8-9 9-10

G1:C,H

Match level :

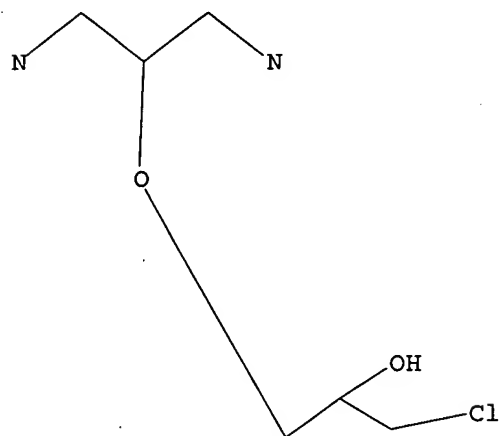
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS

L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s l5 ful

FULL SEARCH INITIATED 13:54:51 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 186 TO ITERATE

100.0% PROCESSED 186 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L6 2 SEA SSS FUL L5

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

500.82

501.03

FILE 'CAPLUS' ENTERED AT 13:54:58 ON 28 DEC 2006

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FILE COVERS 1907 - 28 Dec 2006 VOL 146 ISS 1  
FILE LAST UPDATED: 27 Dec 2006 (20061227/ED)

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<http://www.cas.org/infopolicy.html>

=> s l5

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 13:55:00 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS:	ONLINE	**COMPLETE**
	BATCH	**COMPLETE**
PROJECTED ITERATIONS:	22 TO	418
PROJECTED ANSWERS:	0 TO	0

L7 0 SEA SSS SAM L5

L8 0 L7

=> s l6

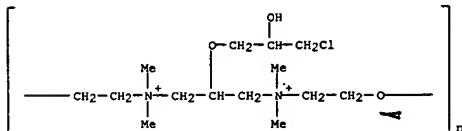
L9 1 L6

=> d fbib ed

IS ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1979:126958 CAPLUS  
DN 90:126958  
TI Use of water-soluble polyelectrolytes as flocculants for clarification of  
waste waters during the working of placer deposits  
AU Esenovskaya, L. N.; Turchaninova, L. P.; Tsarik, L. Ya.; Chikin, Yu. M.  
CS Inst. Nefte- Uglekhim. Sint., Angarsk, USSR  
SO Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation) (1978),  
51(7), 1551-5  
CODEN: ZPKHAB; ISSN: 0044-4618  
DT Journal  
LA Russian  
ED Entered STN: 12 May 1984

=> d abs hitstr

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
 AB Wastewaters (containing a high concentration of finely dispersed clay)  
 were treated by com. polyelectrolytes. The effectiveness of a flocculant was assessed by measuring the settling rate of the flocculated particles. All cationic polyelectrolytes were effective. High-mol.-weight polymers gave the best results. Polyelectrolytes were recommended for industrial application. The addition of 6-8 mg/L of VA-2 [26780-21-2] (mol. weight 60,000) reduced the turbidity from 8 g/L to 20 mg/L after 2-4 h settling. The optimum polyelectrolyte dosage is substantially less than that of inorg. coagulants for the same degree of clarification.  
 IT 69684-13-5  
 RL: PROC (Process)  
 (flocculants, for treatment of wastewater from placer mining)  
 RN 69684-13-5 CAPLUS  
 CN  
 Poly[oxy-1,2-ethanediyl(dimethyliminio)[2-(3-chloro-2-hydroxypropoxy)-1,3-propanediyl](dimethyliminio)-1,2-ethanediyl dichloride] (9CI) (CA INDEX NAME)





=> FIL STNGUIDE  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
5.57	507.50

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
-0.75	-0.75

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FILE 'STNGUIDE' ENTERED AT 13:55:31 ON 28 DEC 2006  
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Dec 22, 2006 (20061222/UP).

=> fil reg  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
0.12	507.62

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
0.00	-0.75

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 13:56:59 ON 28 DEC 2006  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 27 DEC 2006 HIGHEST RN 916420-05-8  
DICTIONARY FILE UPDATES: 27 DEC 2006 HIGHEST RN 916420-05-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

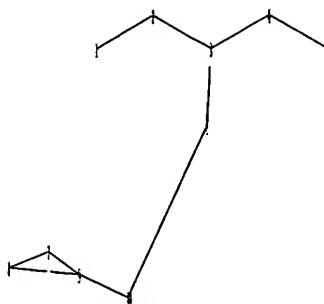
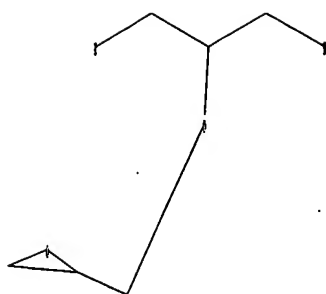
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10-795772a4.str



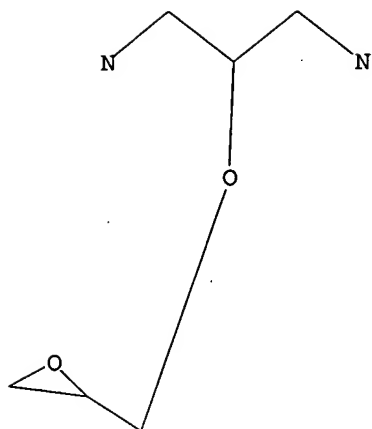
chain nodes :  
 1 2 3 4 5 6 10  
 ring nodes :  
 7 8 9  
 chain bonds :  
 1-2 2-3 3-4 3-6 4-5 6-10 9-10  
 ring bonds :  
 7-8 7-9 8-9  
 exact/norm bonds :  
 1-2 3-6 4-5 6-10 7-8 7-9 8-9  
 exact bonds :  
 2-3 3-4 9-10

G1:C,H

Match level :  
 1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom  
 10:CLASS

L10 STRUCTURE UPLOADED

=> d  
 L10 HAS NO ANSWERS  
 L10 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s l10 ful  
 FULL SEARCH INITIATED 13:57:13 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1166 TO ITERATE

100.0% PROCESSED 1166 ITERATIONS 3 ANSWERS  
 SEARCH TIME: 00.00.01

L11 3 SEA SSS FUL L10

=> fil caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	166.94	674.56
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.75

FILE 'CAPLUS' ENTERED AT 13:57:17 ON 28 DEC 2006  
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FILE COVERS 1907 - 28 Dec 2006 VOL 146 ISS 1  
FILE LAST UPDATED: 27 Dec 2006 (20061227/ED)

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<http://www.cas.org/infopolicy.html>

=> s l11

L12            2 L11

=> d fbib ed abs hitstr tot

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2005:985119 CAPLUS  
 DN 143:250074  
 TI Synthetic multiple quaternary ammonium salts useful for quaternization of polymers, etc.  
 IN Lang, Weillan; Little, Charles; Van De Pas, Victor  
 PA USA  
 SO U.S. Pat. Appl. Publ., 10 pp.  
 CODEN: USXKCO  
 DT Patent  
 LA English  
 FAN.CNT 1

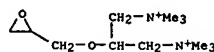
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2005194113	A1	20050908	US 2004-795772	20040308
CA 2558673	A1	20051020	US 2004-550274P	20040305
			CA 2005-2558673	20050301
			US 2004-550274P	20040305
			US 2004-795772	20040308
			WO 2005-US6552	20050301
WO 2005097732	A1	20051020	WO 2005-US6552	20050301
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1720824	A1	20061115	US 2004-550274P	20040305
			US 2004-795772	20040308
			EP 2005-724150	20050301
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			US 2004-550274P	20040305
			US 2004-795772	20040308
			WO 2005-US6552	20050301

OS MARPAT 143:250074  
 ED Entered STN: 09 Sep 2005  
 AB This invention pertains to novel multiple quaternary ammonium salts and their derivs. of the formula  
 [R3R2R1N+CH2CH(OR6)CH2N+R4R5CH2CH(OR6)CH2N+R1  
 'R2'R3']A- (R1,R1',R2,R2',R3,R3',R4,R5 = alkyl, aryl, aralkyl, -CH2CH(OR6)CH2N+R1R2R3; ≥1 of R6 = glycidyl, 3-chloro-2-hydroxypropyl; A = anion). This invention also pertains to multiple quaternary ammonium salts and their derivs. represented by the formula [R3R2R1N+CH2CH(OR4)CH2N+R4R5]A- (R1,R1',R2,R2',R3,R3',R4,R5 = alkyl, aryl, aralkyl, -CH2CH(OR4)CH2N+R1R2R3; ≥1 of R4 = glycidyl, 3-chloro-2-hydroxypropyl; A = anion).  
 IT 863477-00-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1991:680870 CAPLUS  
 DN 115:280870  
 TI Complexes of complexing agents bonded to cascade polymers for use in pharmaceuticals  
 IN Platzek, Johannes; Schmitt-Willich, Heribert; Gries, Heinz; Schumann-Giemperli, Gabriele; Vogler, Hubert; Weinmann, Hanns Joachim; Bauer, Hans  
 PA Schering A.-G., Pol.  
 SO Ger. Offen., 36 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3938992	A1	19910523	DE 1989-3938992	19891121
EP 430863	A2	19910605	EP 1990-730017	19901119
EP 430863	A3	19920304		
EP 430863	B1	19950517		
EP 430863	B2	19990825		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ES 2073006	T3	19950801	DE 1989-3938992	19891121
			ES 1990-730017	19901119
HU 56121	A2	19910729	DE 1989-3938992	19891121
			HU 1990-7217	19901120
CA 2030472	A1	19910522	DE 1989-3938992	19891121
CA 2030472	C	20030610	CA 1990-2030472	19901121
FI 9005744	A	19910522	DE 1989-3938992	19891121
FI 107931	B1	20011031	FI 1990-5744	19901121
NO 9005037	A	19910522	DE 1989-3938992	19891121
NO 178032	B	19951002	NO 1990-5037	19901121
NO 178032	C	19960110		
AU 9066859	A	19910530	DE 1989-3938992	19891121
AU 684453	B2	19971218	AU 1990-66859	19901121
JP 03246234	A	19911101	DE 1989-3938992	19891121
JP 3179092	B2	20010625	JP 1990-314440	19901121
ZA 9009352	A	19911224	DE 1989-3938992	19891121
			ZA 1990-9352	19901121
US 5364614	A	19941115	DE 1989-3938992	19891121
			US 1990-617077	19901121
IL 96434	A	19950124	DE 1989-3938992	19891121
			IL 1990-96434	19901121
KR 202796	B1	19990615	DE 1989-3938992	19891121
			KR 1990-18949	19901121
JP 2000355593	A	20001226	DE 1989-3938992	19891121
			JP 2000-130116	19901121
			DE 1989-3938992	19891121
			JP 1990-314440	19901121
GR 3031629	T3	20000131	GR 1999-402638	19991015
US 2002068037	A1	20020606	DE 1989-3938992	19891121
US 6576222	B2	20030610	US 2001-973836	20011011
			DE 1989-3938992	19891121
			US 1990-617077	19901121

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 (synthetic multiple quaternary ammonium salts useful for quaternization of polymers, etc.)  
 RN 863477-00-3 CAPLUS  
 CN 1,3-Propanediaminium, N,N,N',N',N'-hexamethyl-2-(oxiranylmethoxy)-, dichloride (9CI) (CA INDEX NAME)



● 2 Cl<sup>-</sup>

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

US 1994-209098	B1	19940311
US 1994-353390	A1	19941202
US 1996-743535	A3	19961104
US 1998-156048	A3	19980917
US 2000-510363	A3	20000222
US 2000-628179	A3	20000728
US 2002-316094		20021211
DE 1989-3938992	A	19891121
US 1990-617077	A1	19901121
US 1994-209098	B1	19940311
US 1994-353390	A1	19941202
US 1996-743535	A3	19961104
US 1998-156048	A3	19980917
US 2000-510363	A3	20000222
US 2000-628179	A3	20000728
US 2001-973836	A3	20011011
US 2004-953582		20040930
DE 1989-3938992	A	19891121
US 1990-617077	A1	19901121
US 1994-209098	B1	19940311
US 1994-353390	A1	19941202
US 1996-743535	A3	19961104
US 1998-156048	A3	19980917
US 2000-510363	A3	20000222
US 2000-628179	A3	20000728
US 2001-973836	A3	20011011
US 2002-316094		20021211

ED Entered STN: 27 Dec 1991  
 AB Cascade polymers containing complexing ligands and, optionally, ≥5 ions of elements with atomic number 21-29, 42, 44, or 57-83 and cations of inorg. or organic bases, amino acids, or amino amides are useful in magnetic resonance imaging and x-ray diagnosis. The reaction of 50 mmol N(CH2CH2NH2)3 with 600 mmol Me acrylate (I) in MeOH at room temperature gave 92.3% hexa-Me ester of a cascade polymer which was treated (40 mmol) with 3.6 mmol ethylenediamine (II) in MeOH to give 94% hexa-amine derivative, successive reactions of which with I and II gave a tetracosamine derivative of a tetracosamine ester containing 25.2% N. Treating 4.94 g this polymer with 29.04 g N3-[(2,6-dioxomorpholino)ethyl]-N6-(2-carbomethoxyethyl)-3,6-diazaoctanedioic acid in H2O at pH 9.0, adjusting the pH to 7 by ion exchange, ultrafiltration, and freeze drying gave 13.6 g powder, 10.0 g of which was stirred with 2.77 g Gd2O3 in H2O at 80° for 30 min to give 12.1 g polymer containing 17.9% Gd and 5.6% H2O, with T1 relaxivity 12.98 and 13.23 L/mmol-s in H2O and plasma, resp.  
 IT 136533-08-9P  
 RL: PREP (Preparation) (preparation of, and reaction with hexaaminoheptadecoxycyclodextrin hexahydrochloride)  
 RN 136533-08-9 CAPLUS  
 CN 1,3-Propanediamine, 2-(oxiranylmethoxy)-N,N,N',N'-tetrakis(phenylmethyl)- (9CI) (CA INDEX NAME)

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

